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Authors

Morlett Paredes, Alejandra
Lee, Ellen E
Chik, Lisa
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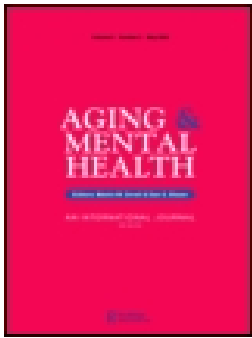
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Qualitative study of loneliness in a senior housing community: the importance of wisdom and other coping strategies

Alejandra Morlett Paredes^{a,b}, Ellen E. Lee^{a,b,c}, Lisa Chik^a, Saumya Gupta^a, Barton W. Palmer^{a,b,c}, Lawrence A. Palinkas^d, Ho-Cheol Kim^e and Dilip V. Jeste^{a,b,f}

^aDepartment of Psychiatry, University of California San Diego, La Jolla, CA, USA; ^bSam and Rose Stein Institute for Research on Aging, University of California San Diego, La Jolla, CA, USA; ^cUniversity of California, Veterans Affairs San Diego Healthcare System, San Diego, CA, USA; ^dDepartment of Family Medicine and Public Health, University of California San Diego, La Jolla, CA, USA; ^eScalable Knowledge Intelligence, IBM Research-Almaden, San Jose, CA, USA; ^fDepartment of Neurosciences, University of California San Diego, La Jolla, CA, USA

ABSTRACT

Objective: Older adults are at a high risk for loneliness, which impacts their health, well-being, and longevity. While related to social isolation, loneliness is a distinct, internally experienced, distressing feeling. The present qualitative study sought to identify characteristics of loneliness in older adults living independently within a senior housing community, which is typically designed to reduce social isolation.

Method: Semi-structured qualitative interviews regarding the experience of loneliness, risk factors, and ways to combat it were conducted with 30 older adults, ages 65–92 years. The interviews were audiotaped, transcribed, and coded using a grounded theory analytic approach based on coding, consensus, co-occurrence, and comparison.

Results: Three main themes with multiple subthemes are described: (A) Risk and Protective factors for loneliness: age-associated losses, lack of social skills or abilities, and protective personality traits; (B) Experience of loneliness: Sadness and lack of meaning as well as Lack of motivation; and (C) Coping strategies to prevent or overcome loneliness: acceptance of aging, compassion, seeking companionship, and environment enables socialization.

Discussion: Despite living within a communal setting designed to reduce social isolation, many older adults described feeling lonely in stark negative terms, attributing it to aging-associated losses or lack of social skills and abilities. However, interviewees also reported positive personal qualities and actions to prevent or cope with loneliness, several of which mirrored specific components of wisdom. The results support the reported inverse relationship between loneliness and wisdom and suggest a potential role for wisdom-enhancing interventions to reduce and prevent loneliness in older populations.

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KEYWORDS

Social isolation; retirement; aging; depression; compassion; older adults

Introduction

There is a public health epidemic of loneliness with serious physical and mental implications (Lubben, Gironde, Sabbath, Kong, & Johnson, 2015; Murthy, 2017). Loneliness rivals smoking and obesity in its impact on shortening longevity. In the UK, economic consequences of loneliness for businesses (lost productivity, greater healthcare, and caregiver expenses) were estimated to be over \$3 billion annually, and this led to establishment of a new Ministry of Loneliness in 2018 (McDaid, Bauer, & Park, 2017). Older individuals are at a high risk for loneliness due to worsening physical health, loss of family and friends, as well as social isolation (Lee et al., 2018).

Loneliness is related to but distinct from social isolation, both conceptually and psychometrically (Hawkey & Cacioppo, 2010; Tabue Tegu et al., 2016). Specifically, loneliness is defined as subjective distress resulting from a discrepancy between desired and actual relationships (Ernst & Cacioppo, 1999), while social isolation is the objective lack of social contacts and interactions (Cornwell & Waite, 2009; Gardner, Brooke, Ozanne, & Kendig, 1999). Loneliness

may be modifiable, and person-focused interventions are an important but underdeveloped approach (Perissinotto, Holt-Lunstad, Periyakoil, & Covinsky, 2019).

Several published papers have focused on the qualitative experience of loneliness among overseas or immigrant populations (Wong, Chau, Fang, & Woo, 2017), medically ill persons (Drageset, Eide, Dysvik, Furnes, & Hauge, 2015; Sjöberg, Edberg, Rasmussen, & Beck, 2019), and people at highest risk for loneliness (Neves, Sanders, & Kokanović, 2019). However, there is little published literature on qualitative studies of loneliness among independent living older adults in the community. We have been studying physical, mental, and cognitive function in 100+ older adults living in the independent living sector of a senior housing community (Jeste, Glorioso, et al., 2019). Combining data from multiple studies, we found a high prevalence of moderate-severe loneliness using the UCLA-3 loneliness scale (Lee et al., 2018; Russell, 1996). The most significant association of loneliness was an inverse relationship with wisdom, as measured with the San Diego Wisdom Scale (SD-WISE; Thomas et al. (2019)). Wisdom is a complex personality trait comprised of several specific components: emotional

regulation with positivity, empathy and compassion, self-reflection, decisiveness amid uncertainty, and spirituality (Jeste, Lee, et al., 2019).

Older adults are increasingly moving into senior housing or retirement communities (Jeste & Childers, 2017). Investigating loneliness within such communities makes it possible to study subjective loneliness in older adults who are not socially isolated, since the senior housing communities provide proximity to others, shared common areas, planned social outings, transportations, and other communal activities. This is in contrast to most of the older adults who live by themselves or only with their spouses or partners and are socially isolated due to their physical disabilities as well as lack of opportunities for social interactions. Understanding loneliness within the context of a senior housing community may be relevant to better understanding loneliness within other settings, as well as advancing community- and facility-based interventions for loneliness.

As loneliness is an inherently subjective internal experience, it is important to consider the qualitative perspectives of older individuals with respect to the characteristics and associations of loneliness. Using individual qualitative interviews with 30 older adults, the aim of the present study was to describe the experience of loneliness and risk factors for it as well as coping mechanisms employed by these individuals to try to prevent or overcome it.

Methods

Study design

The present work is a part of a larger ongoing study of physical, cognitive, and mental health in over 100 residents of the independent living sector of a senior housing community in San Diego County (Jeste, Glorioso, et al., 2019).

All the participants provided written informed consent for study participation. Inclusion and exclusion criteria for enrollment were: i) English speaking individuals aged ≥ 65 years, ii) Ability to engage in a qualitative interview, and iii) no known diagnosis of dementia or any other severely disabling illnesses. This study protocol was approved by the University of California San Diego (UCSD) Human Research Protections Program (HRPP), as well as the administrative leaders of the housing community. Participants for the overall parent study were recruited through short presentations at the residential community and through fliers.

The senior housing community is situated on 12 acres of land in a suburb of San Diego. The community has over 270 independent residential units and offers different levels of care including assisted living and memory care. The senior housing community boasts an extensive array of activities and amenities designed to bring residents together in both large and small group settings including afternoon socials and a weekly Happy Hour, quilting and sewing, knitting, card games, bead and art classes, as well as games like Bingo, Mah Jong, Billiards, and Dartball. There is also a well-equipped Wood Shop, an 18-hole putting course, and a tennis court. Residents can obtain a garden plot to grow plants, flowers and vegetables. The facility theater hosts outside musical and entertainment groups, lectures, movies, and special meetings. Transportation is provided weekly to off-site venues such as restaurants and local community events. The main

building includes front desk concierge services, restaurant, chapel, beauty salon, bank, library, as well as a well-equipped fitness center with an indoor pool and regular exercise classes.

Quantitative loneliness measure

To quantitatively assess loneliness, the 20-item UCLA Loneliness Scale (Version 3) or UCLA-3 was administered to all participants (Russell, 1996). It has been shown to have strong test-retest reliability, high internal consistency, and validity. While the word 'lonely' is never used explicitly, participants rate the frequency of several experiences (e.g. 'How often do you feel in tune with others around you?' or 'How often do you feel left out?') on a 4-point Likert scale. The published cut-offs for loneliness severity on the UCLA-3 scale are: Total score < 28 = No/Low Loneliness, Total score $28-43$ = Moderate Loneliness, and Total score > 43 = High Loneliness (Cacioppo & Patrick, 2008).

Qualitative interviews

The sample size for qualitative interviews ($N = 30$) was determined by the point at which we observed saturation of themes (Guest, Bunce, & Johnson, 2006). The first 30 subjects from the parent study who completed qualitative interviews were included in the present study, without consideration of their demographics or any information regarding their clinical rating scale scores on loneliness or other measures. We did not select study participants based on their level of loneliness as we sought to obtain an unbiased sample of residents of that senior housing community. As a result, some residents were experiencing loneliness while others were not.

Qualitative interviews began in April 2018 and ended in August 2019. Semi-structured qualitative interviews were conducted within the subjects' residences by a trained staff member (LC), using a predetermined list of broad, research-driven probes developed by the investigator team. Primary questions were: (1) Do you ever feel lonely, and if so, how often, and how would you describe the feelings? (2) If you don't feel lonely, why do you think others may feel lonely? (3) How might aging play a role in loneliness? and (4) What do you do, or think that others can do, to not feel lonely anymore?

During each interview, the interviewer started with general questions, including those listed above, and asked additional questions based on individual responses, in order to elicit further details. Qualitative research techniques outlined by Patton (2002) served as the training manual. Interviews were no longer than 1.5 h in length, with the content of each interview audio-taped and subsequently transcribed.

Data analysis

The transcripts were uploaded into qualitative analyses program Dedoose (Dedoose Version 8.0.35, 8.0.35, 2018) and analyzed using the method of 'Coding Consensus, Co-occurrence, and Comparison', outlined by Willms et al. (1990) and rooted in grounded theory (i.e. theory generated from data and illustrated using characteristic examples

(Glaser & Strauss, 1967). The personal interview content was initially coded independently by the project investigators at a general level in order to condense the data into analyzable units. Segments of transcripts ranging from a phrase to several paragraphs were assigned codes, based on key questions from the personal interview guide or themes. In certain instances, it was appropriate for the same segment of text to be assigned more than one code. Each transcript was independently coded by three authors (AMP, EEL, SG), who coded two initial sets of 5 transcripts each, for themes and subthemes, and met with the other authors to discuss the coding and reach a consensus. The authors developed a coding matrix of three themes, each with several subthemes. Disagreements in code description or assignment were resolved through discussions among investigators with the appropriate refinement of codes, as needed. The list of codes was finalized via group consensus, and resulted in a list of themes, issues, and opinions related to loneliness. Next, AMP, EEL, and SG independently coded the other 20 interviews in their entirety. Eighty-six percent of the segments were assigned the same codes, indicating a high degree of concordance among the raters (Landis & Koch, 1977). Through the process of constant comparison (Glaser & Strauss, 1967), the independent categories were further condensed into three broad themes. These themes were derived from the four questions, based on the theoretically grounded sets of categories as described by Braun and Clarke (2006).

Results

Sample characteristics

The interviewees were 30 adults between the ages of 67 and 92 years (mean age 81.6, SD = 7.0). Two-thirds (67%) were women and 90% were Caucasian. In terms of formal education, 90% had at least some college education. The subjects had a mean total score of 39.3 (SD 11.9) on the UCLA-3 loneliness scale: with 15% with no/low loneliness, 63% with moderate loneliness, and 22% with high loneliness. Comparable scores in the non-participant subjects from the larger parent study were: mean 36.9 (SD 9.3) with 18% with no/low loneliness, 50% with moderate loneliness, and 32% with high loneliness. Mean loneliness scores and severity of loneliness did not differ between the groups (Mann-Whitney $U = 888.5$, $p = 0.65$; &Chi²(2) = 1.33, $p = 0.51$; respectively). The subsample featured in this study did not differ in age, sex, race, or education compared to the total sample (Jeste, Glorioso, et al., 2019).

Qualitative findings

The three main themes from the qualitative interviews were: (A) Risk and Protective factors for loneliness, (B) Experience of loneliness, and (C) Coping strategies to prevent or overcome loneliness. Some subjects highlighted how aging-related losses contributed to their loneliness. Other participants noted particular personality characteristics or social skills that contributed to or alleviated/prevent loneliness. Many subjects described the subjective

experience of loneliness such as feelings of sadness and hopelessness, while some non-lonely subjects perceived lonely people as lacking motivation. A number of interviewees emphasized actions that helped them cope with loneliness. The three main themes and their subthemes are discussed in more details below, with illustrative quotes from the participants, identified in italics.

Theme (a): Risk and protective factors for loneliness

Subtheme 1. Aging-associated losses. A number of residents attributed their loneliness to losses associated with aging: the deaths of partners, family, and friends as well as the loss of physical health with aging. Subjects commented on how such losses impacted their ability to engage in social activities and seek companionship.

- *Well, as you get older, there's less and less people. You know, people die off around you, and a world of loneliness. And I suppose too, as you get older, it's harder to get around and see the people that you do know.* [Subject A (female)]

Subtheme 2: Lack of social skills. The participants who did not endorse loneliness themselves perceived lonely people as lacking social skills that enable them to connect others.

- *And so often, I hear a lot of them don't have social skills. They're perfectly capable people but they don't have the social skills.* [Subject B (male)]

Subtheme 3. Protective personality traits (oneliness and spirituality). Several subjects described personal qualities that were protective against loneliness. Enjoyment of solitude or 'oneliness' where one could be alone without the distress that characterizes loneliness (Alberti, 2018).

- *I usually don't feel lonely. I may feel alone, but that doesn't mean that I have a craving to have somebody with me... This brings up the thought that I'm proud I can stay by myself. And handle myself, so, not saying that's right or wrong.* [Subject C (male)]

A number of individuals spoke about their faith and spirituality as an important way of coping with losses and preventing loneliness. Some spoke about how their faith helped them cope with losses of a partner, while others described how religion helped them connect to other individuals in the community.

- *Here one of the things that I enjoy is the fact that we have all the faiths here, and also, opportunity ... so I feel very comfortable going to the Catholic Church ... I go to the Protestant services ... I'm in my search for God. He's everywhere, so I go everywhere ... I read the Bible, and I more or less read the Torah. I feel very comfortable.* [Subject D (female)]

Theme (B): Experience of loneliness

Subtheme 4. Personal experience of sadness and lack of meaning. Many participants emphasized the association of loneliness with feelings of emptiness and sadness. The lack

of meaning and hope was echoed in other quotes. There was also a sense of feeling isolated and ignored by others.

- *Oh, ugly. Just ugly. ... I'm very silent, and I would be away from everybody and everything... I can think of periods where I felt lonely, and it was a sense of not being attached, not having very much meaning, and not feeling very hopeful.* [Subject E (female)]

Several participants reported feeling helpless and powerless when they were lonely—highlighting how the social disconnectedness left them vulnerable.

- *That there is no one else in your situation. That you do not know how to change it so the sudden loss of control over your life maybe. I came to this home, what am I going to do? I don't know what to do, that being lost and not having control and sometimes it can lead you to not be able to make decisions and then it just gets worse.* [Subject F(female)]

Subtheme 5: Perception of others' experience of loneliness: Lack of motivation. The participants who did not endorse loneliness themselves perceived lonely people as being unmotivated. This lack of motivation, desire or self-efficacy may hamper lonely individuals from seeking and establishing social connections.

- *It's a feeling of nothing... You're not feeling glad. You're not feeling sad. You're feeling nothing, and you don't want to do anything... that's the bad part. People get into that. They don't want to do anything, and they're expecting somebody to do something for them.* [Subject G (female)]

Theme (C): coping strategies to prevent or overcome loneliness

Several participants highlighted specific actions to prevent or cope with and overcome loneliness. These included a number of subthemes revolving around acceptance of aging-related changes, compassion, companionship, and activities offered through the community.

Subtheme 6: Acceptance of aging. In contrast to the earlier quotes noting the age-related losses, some participants noted positive changes that occurred with aging. They reported their acceptance of the functional decline in older age, noting how they had adapted their mindset to their new normal.

- *Well, it's something I have to accept, cause I've got it, and it's something there's no use being afraid of it. I've got to go along with what I've got with it... I used to mountain climb... If I can't walk anymore, I'll crawl, so you have to learn how to be realistic and not brood about it... I know I'm getting older but I, I consider life is a transition.* [Subject H (male)]

Subtheme 7: Compassion. Some people described how helping others helped them prevent feeling lonely. Thus,

connecting with others seemed to be mutually beneficial—to others and to themselves.

- *Another technique that I had for years, if you're feeling lonely then go out and do something for somebody else... That's proactive...* [Subject G (female)]

Subtheme 8: Seeking companionship. Some older adults discussed feeling lonely as a choice; that an individual could choose to seek the company of others to combat loneliness. A few interviewees described deliberately changing their behaviors, despite risking possible rejection.

- *I felt lonely because I chose to stay away from people because I was sick, but I felt alone for a while and said to myself, did I make the right move... as soon as I started getting involved, everybody has welcomed you for the most part. I mean, I've had my rejections asking if I could join somebody at a table or whatever and say okay... I'll go find another table, no big deal.* [Subject I (female)]

Subtheme 9: Environment that enables socialization. Several residents noted specific features of their senior housing community structure that helped to reduce social isolation and combat loneliness. At the same time, some stressed the fact that people have to exert themselves to make use of the opportunities that are available.

- *We have the putting green here, I can go do that. We have pool tables here, I can go on up and shoot a game of pool or something, and our poker games, and uh ... If nothing else, I'll go down to the lobby, and I can find somebody down there to talk to, and I can go into the library, and they've got a computer in there, and they got a dart board there, I can go that, and ... but ... I just have to get up and do something.* [Subject J (male)]

Discussion

The results of this study suggest that even in structured community environments with considerable opportunities for socialization, many older adults experience strong and distressing feelings of loneliness. However, a few individuals never feel lonely while others have felt lonely at specific time periods, often tied to losses. While there are environmental factors that contribute to social isolation (an objective construct), there are also a number of personal qualities and traits that seemed to be protective against loneliness (a subjective feeling). [Figure 1](#) outlines the themes and subthemes related to loneliness. These themes and subthemes are inter-related with one another as they contribute to feelings of loneliness in a person.

Some of the themes and subthemes expressed by the participants in the current study overlap with those from other published studies on loneliness. For example, the experience of loneliness described in other populations of older adults includes helplessness and alienation from society (Wong et al., 2017). However, our subjects also spoke at length about emptiness as well as lack of meaning and hope. Our findings on the role of aging in loneliness support other qualitative work in older adults that also reported the contribution of age-related disabilities (Finlay

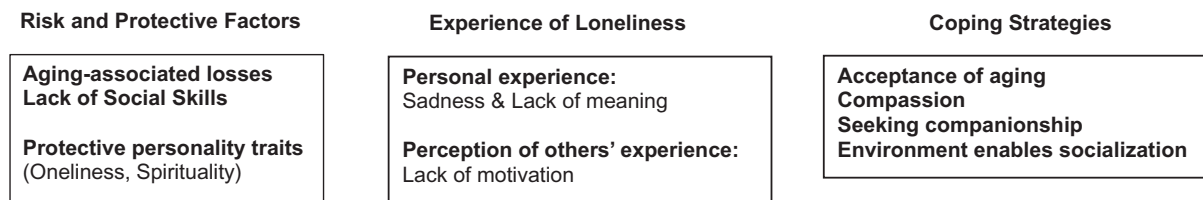


Figure 1. Diagram illustrating inter-connected themes and subthemes related to loneliness.

& Kobayashi, 2018; Li, Xu, & Chi, 2018) and shrinking social network (Finlay & Kobayashi, 2018; Li et al., 2018; Wong et al., 2017), though the adaptation to aging has not been observed. Similarly, other studies have reported ways in which older adults cope with loneliness, such as keeping busy by oneself (Drageset et al., 2015; Stanley et al., 2010) and doing activities interacting with others (Drageset et al., 2015; Finlay & Kobayashi, 2018). An Australian study reported benefits to being alone, which aligned with our characterization of oneliness or comfort with solitude, as a time to self-reflect and conduct spiritual activities (Stanley et al., 2010). One community-based study suggested that specific neighborhood features (racial inclusiveness, representation of own ethnic group, shared public spaces, and communal resources/amenities) were associated with lower levels of loneliness (Finlay & Kobayashi, 2018; Li et al., 2018).

To our knowledge, our study is the first one to examine loneliness in senior housing communities, which are structured and operated with a goal of promoting social activities. Whereas several residents commented on the availability of such opportunities to socialize as a way to overcome loneliness, it is notable that many other residents still felt lonely despite a lack of objective social isolation. Thus, our results stress the critical role of positive psychological traits that can help a person prevent or cope with loneliness—e.g. acceptance of the changes associated with aging, compassion, and spirituality. While a number of loneliness interventions have focused on strengthening social networks, the results have been mixed (Cohen-Mansfield & Perach, 2015).

In this study, we observed several interesting relationships of loneliness with several components of wisdom (spirituality, emotional regulation, self-reflection, decisiveness, compassion, spirituality). Spirituality, a component of wisdom, was highlighted as a personal quality that was protective against loneliness for some people. Under the theme of the Experience of Loneliness, the interviewees mentioned emptiness and sadness, which stood in contrast with emotional regulation with positivity, a component of wisdom. Several individuals attributed others' loneliness to inability and lack of motivation to act on loneliness, which has a parallel to lacking decisiveness (a component of wisdom). With aging, we saw two opposite perspectives. Some subjects attributed their loneliness to aging-associated loss of friends, family, and physical health, whereas others accepted the inevitable losses that occur with aging (self-reflection). Baltes and Baltes, pioneers in the field of wisdom research, proposed the Model of Selective Optimization with Compensation for successful aging (Baltes & Baltes, 1990). Our findings were consistent with their model, especially in how older adults would adjust their goals, adapting to age-related disabilities through acceptance. Finally, successful strategies to

prevent or cope with wisdom involved compassion, a key component of wisdom.

In addition, these findings open up the opportunity to reflect on the current social environment these housing communities offer and how small changes in their social activities could effectively increase meaning and purpose of life for individuals, possibly strengthening interpersonal relationships that could create meaningful and positive results on a person's emotional state (e.g. reduce loneliness). Appropriately cultivated social environment and well-planned shifts in social programming can effectively increase a sense of meaning and purpose for residents, possibly strengthening interpersonal relationships as well, via shared efforts to create meaningful results. The success of such programs depends on ensuring that they meet the needs of each individual resident's desire for a genuine social connection. Future studies should look at these interactions (current activities and the addition of meaningful/purposeful activities) in order to personalize the residents' social agenda as this may be what distinguishes feeling alone and feeling socially engaged.

As a whole, the results from this study suggest that people's experience of living with loneliness is shaped by a number of personal and environmental factors which remain in a constant, inter-connected relationship to one another and determine the way people adjust to loneliness over time. This is consistent with the complexity theory described by Thelen (2005) and Gorska, Forsyth, and Maciver (2018), which considers the aging experience from multiple varied and interacting perspectives (cultural, biological, social, etc.)

An important feature of the present study is that it supports the previously published quantitative finding of an inverse relationship between loneliness and wisdom (Lee et al., 2018). There might even be a possible biological basis for such a relationship. Recent genomics research has revealed an association between loneliness and genes expressed in the prefrontal and anterior cingulate cortices (Abdellaoui et al., 2018)—the same areas as those putatively related to components of wisdom (Meeks & Jeste, 2009). It is worth noting that wisdom is a potentially modifiable trait, as there are a number of studies with effective interventions for subcomponents of wisdom. There is evidence that psychosocial interventions can improve emotional regulation and compassion/empathy as well as spirituality (Kelly & Carter, 2015; Margolin, Beitel, Schuman-Olivier, & Avants, 2006; Weiss et al., 2018). For example, mindfulness-based stress reduction has been shown to improve self-compassion in medical students (Erogul, Singer, McIntyre, & Stefanov, 2014), while goal management training increased emotional regulation in adults with acquired brain injuries (Tornas, Lovstad, Solbakk, Schanke, & Stubberud, 2016).

Loneliness may be modifiable through use of technology to facilitate social interactions (Tsai & Tsai, 2011) or to foster new relationships (Weinert, Cudney, & Hill, 2008). However, strong evidence for technological or other interventions in older community-dwelling individuals is lacking (Cohen-Mansfield & Perach, 2015), and person-focused interventions for social isolation are an important but underdeveloped approach (Perissinotto et al., 2019). The current study has potential implications for developing new interventions to tackle or prevent loneliness. While living alone contributes to social isolation, promoting wisdom may enhance the quality of social relationships through compassion and emotional regulation with positivity, and offer a unique solution to loneliness, beyond external interventions such as support groups and facilitation of social interactions through technology and social media (Kharicha, Manthorpe, Iliffe, Davies, & Walters, 2018).

There are several limitations to our study. First, participants were recruited from a senior housing community in San Diego County and were mostly well educated Caucasians from middle or upper socioeconomic strata. Thus, the results may not generalize to people from other parts of the country or those living in their own homes or rental apartments or those from ethnic minority and/or socioeconomically disadvantaged backgrounds. Second, the salience of the past in relationship to current experience of aging was likely influenced by the interview, as one of the questions asked of participants was about the impact of aging on their loneliness. In addition, a more in-depth investigation of respondents' personal history (e.g. life events) could provide a greater understanding of their individual perspectives on loneliness.

Despite the above limitations, the current findings are therapeutically relevant. Thus, consistent with our quantitative analyses showing a significant inverse correlation between loneliness and positive psychological factors such as wisdom (Lee, 2019), the present qualitative findings suggest some of the possible ways in which aspects of wisdom might serve to reduce feelings of loneliness, although controlled trials of interventions to enhance wisdom and reduce loneliness are necessary. Further studies are also needed to better understand the experience of loneliness in older adults in different settings, comparing individuals in senior housing communities to those living by themselves. Similarly, studies of loneliness in older adults from racial/ethnic minority groups, who are at an elevated risk of loneliness (Foti et al., 2019; Gonyea, Curley, Melekis, Levine, & Lee, 2018; Lasgaard, Friis, & Shevlin, 2016), would be of considerable value to diverse groups of individuals.

Authors contribution

A. M. Paredes helped design the study, coded transcripts, and edited the manuscript. E. E. Lee helped design the study, coded transcripts, and prepare the manuscript. L. Chik conducted the qualitative interviews. S. Gupta coded transcripts, and edited the manuscript. B. W. Palmer helped plan loneliness probes and edited manuscript. L. A. Palinkas helped with data analysis and edited the manuscript. H-C. Kim helped design the study and edited the manuscript. D. V. Jeste helped design and implement the study, analyzed results, and helped prepare the manuscript.

Disclosure statement

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References

- Abdellaoui, A., Sanchez-Roige, S., Sealock, J., Treur, J. L., Dennis, J., Fontanillas, P., ... Boomsma, D. I. (2018). Phenome-wide investigation of health outcomes associated with genetic predisposition to loneliness. *bioRxiv* 468835. doi:10.1101/468835
- Alberti, F. (2018). *Loneliness is a modern illness of the body, not just the mind*. Retrieved from <https://www.theguardian.com/commentisfree/2018/nov/01/loneliness-illness-body-mind-epidemic>.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In M. M. Baltes & P. B. Baltes (Eds.), *Successful aging: Perspectives from the Behavioral Sciences* (pp. 1–34). Cambridge: Cambridge University Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp063oa
- Cacioppo, J., & Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*. New York, NY: W.W. Norton & Company, Inc.
- Cohen-Mansfield, J., & Perach, R. (2015). Interventions for alleviating loneliness among older persons: A critical review. *American Journal of Health Promotion*, 29(3), e109–125. doi:10.4278/ajhp.130418-LIT-182
- Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior*, 50(1), 31–48. doi:10.1177/002214650905000103
- Dedoose Version 8.0.35. (2018). *Web application for managing, analyzing, and presenting qualitative and mixed method research data*. Los Angeles, CA: SocioCultural Research Consultants, LLC. Retrieved from www.dedoose.com.
- Drageset, J., Eide, G. E., Dysvik, E., Furnes, B., & Hauge, S. (2015). Loneliness, loss, and social support among cognitively intact older people with cancer, living in nursing homes—a mixed-methods study. *Clinical Interventions in Aging*, 10, 1529–1536.
- Ernst, J. M., & Cacioppo, J. T. (1999). Lonely hearts: Psychological perspectives on loneliness. *Applied and Preventive Psychology*, 8(1), 1–22. doi:10.1016/S0962-1849(99)80008-0
- Erogul, M., Singer, G., McIntyre, T., & Stefanov, D. G. (2014). Abridged mindfulness intervention to support wellness in first-year medical students. *Teaching and Learning in Medicine*, 26(4), 350–356. doi:10.1080/10401334.2014.945025
- Finlay, J. M., & Kobayashi, L. C. (2018). Social isolation and loneliness in later life: A parallel convergent mixed-methods case study of older adults and their residential contexts in the Minneapolis metropolitan area, USA. *Social Science & Medicine*, 208, 25–33. doi:10.1016/j.socscimed.2018.05.010
- Foti, S. A., Khambaty, T., Birnbaum-Weitzman, O., Arguelles, W., Penedo, F., Espinoza Giacinto, R. A., ... Llabre, M. M. (2019). Loneliness, cardiovascular disease, and diabetes prevalence in the hispanic community health study/study of latinos sociocultural ancillary study. *Journal of Immigrant and Minor Health*, 1–8. doi:10.1007/s10903-019-00885-7
- Gardner, I., Brooke, E., Ozanne, E., & Kendig, H. (1999). *Improving social networks, a research report: improving health and social isolation in the Australian veteran community*. Melbourne: Lincoln Gerontology Centre, La Trobe University.

- Glaser, B. G., & Strauss, A. L. (1967). *Discovery of grounded theory: Strategies for qualitative research*. New York: Routledge.
- Gonyea, J. G., Curley, A., Melekis, K., Levine, N., & Lee, Y. (2018). Loneliness and depression among older adults in urban subsidized housing. *Journal of Aging and Health*, 30(3), 458–474. doi:10.1177/0898264316682908
- Gorska, S., Forsyth, K., & Maciver, D. (2018). Living with dementia: A meta-synthesis of qualitative research on the lived experience. *Gerontologist*, 58(3), e180–e196. doi:10.1093/geront/gnw195
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. doi:10.1177/1525822X05279903
- Hawkey, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40(2), 218–227. doi:10.1007/s12160-010-9210-8
- Jeste, D., & Childers, J. (2017). Strategic planning for transformative senior living: Developing tomorrow's leadership and workforce. *Seniors Housing & Care Journal*, 25(1), 113–126.
- Jeste, D. V., Glorioso, D., Lee, E. E., Daly, R., Graham, S., Liu, J., ... Kim, H.-C. (2019). Study of independent living residents of a continuing care senior housing community: Sociodemographic and clinical associations of cognitive, physical, and mental health. *The American Journal of Geriatric Psychiatry*, 27(9), 895.
- Jeste, D. V., Lee, E. E., Cassidy, C., Caspari, R., Gagneux, P., Glorioso, D., ... Blazer, D. (2019). The new science of practical wisdom. *Perspectives in Biology and Medicine*, 62(2), 216–236. doi:10.1353/pbm.2019.0011
- Kelly, A. C., & Carter, J. C. (2015). Self-compassion training for binge eating disorder: A pilot randomized controlled trial. *Psychology and Psychotherapy: Theory, Research and Practice*, 88(3), 285–303. doi:10.1111/papt.12044
- Kharicha, K., Manthorpe, J., Iliffe, S., Davies, N., & Walters, K. (2018). Strategies employed by older people to manage loneliness: Systematic review of qualitative studies and model development. *International Psychogeriatrics*, 30(12), 1767–1781. doi:10.1017/S1041610218000339
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174. doi:10.2307/2529310
- Lasgaard, M., Friis, K., & Shevlin, M. (2016). "Where are all the lonely people?" A population-based study of high-risk groups across the life span. *Social Psychiatry and Psychiatric Epidemiology*, 51(10), 1373–1384. doi:10.1007/s00127-016-1279-3
- Lee, E. E. (2019). Aging successfully and healthfully. *International Psychogeriatrics*, 31(04), 439–441. doi:10.1017/S1041610219000012
- Lee, E. E., Depp, C., Palmer, B. W., Glorioso, D., Daly, R., Liu, J., ... Yamada, Y. (2018). High prevalence and adverse health effects of loneliness in community-dwelling adults across the lifespan: Role of wisdom as a protective factor. *International Psychogeriatrics*, 31(10), 1–16. doi:10.1017/S1041610218002120
- Li, J., Xu, L., & Chi, I. (2018). Challenges and resilience related to aging in the United States among older Chinese immigrants. *Aging & Mental Health*, 22(12), 1548–1555. doi:10.1080/13607863.2017.1377686
- Lubben, J., Gironde, M., Sabbath, E., Kong, J., & Johnson, C. (2015). Social isolation presents a grand challenge for social work. *Grand Challenges for Social Work Initiative, Working Paper No. 7*.
- Margolin, A., Beitel, M., Schuman-Olivier, Z., & Avants, S. K. (2006). A controlled study of a spirituality-focused intervention for increasing motivation for HIV prevention among drug users. *AIDS Education and Prevention*, 18(4), 311–322. doi:10.1521/aeap.2006.18.4.311
- McDaid, D., Bauer, A., & Park, A.-L. (2017). Making the economic case for investing in actions to prevent and/or tackle loneliness: A systematic review. *A briefing paper*. Personal Social Services Research Unit (PSSRU), London School of Economics and Political Science, London.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, 66(4), 355–365. doi:10.1001/archgenpsychiatry.2009.8
- Murthy, V. (2017). Work and the loneliness epidemic. *Harvard Business Review*, 9.
- Neves, B. B., Sanders, A., & Kokanović, R. (2019). "It's the worst bloody feeling in the world": Experiences of loneliness and social isolation among older people living in care homes. *Journal of Aging Studies*, 49, 74–84. doi:10.1016/j.jaging.2019.100785
- Patton, M. (2002). *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage.
- Perissinotto, C., Holt-Lunstad, J., Periyakoil, V. S., & Covinsky, K. (2019). A practical approach to assessing and mitigating loneliness and isolation in older adults. *Journal of the American Geriatrics Society*, 67(4), 657–662. doi:10.1111/jgs.15746
- Russell, D. W. (1996). UCLA loneliness scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20–40. doi:10.1207/s15327752jpa6601_2
- Sjöberg, M., Edberg, A. K., Rasmussen, B. H., & Beck, I. (2019). Being acknowledged by others and bracketing negative thoughts and feelings: Frail older people's narrations of how existential loneliness is eased. *International Journal of Older People Nursing*, 14(1), e12213. doi:10.1111/opn.12213
- Stanley, M., Moyle, W., Ballantyne, A., Jaworski, K., Corlis, M., Oxlade, D., ... Young, B. (2010). Nowadays you don't even see your neighbours': Loneliness in the everyday lives of older Australians. *Health & Social Care in the Community*, 18(4), 407–414. doi:10.1111/j.1365-2524.2010.00923.x
- Tabue Teguio, M., Simo-Tabue, N., Stoykova, R., Meillon, C., Cogne, M., Amiéva, H., & Dartigues, J.-F. (2016). Feelings of loneliness and living alone as predictors of mortality in the elderly: The PAQUID study. *Psychosomatic Medicine*, 78(8), 904–909.
- Thelen, E. (2005). Dynamic systems theory and the complexity of change. *Psychoanalytic Dialogues*, 15(2), 255–283. doi:10.1080/10481881509348831
- Thomas, M. L., Bangen, K. J., Palmer, B. W., Sirkin Martin, A., Avanzino, J. A., Depp, C. A., ... Jeste, D. V. (2019). A new scale for assessing wisdom based on common domains and a neurobiological model: The San Diego wisdom scale (SD-WISE). *Journal of Psychiatric Research*, 108, 40–47. doi:10.1016/j.jpsychires.2017.09.005
- Tornas, S., Lovstad, M., Solbakk, A. K., Schanke, A. K., & Stubberud, J. (2016). Goal management training combined with external cuing as a means to improve emotional regulation, psychological functioning, and quality of life in patients with acquired brain injury: A randomized controlled trial. *Archives of Physical Medicine and Rehabilitation*, 97(11), 1841–1852. doi:10.1016/j.apmr.2016.06.014
- Tsai, H.-H., & Tsai, Y.-F. (2011). Changes in depressive symptoms, social support, and loneliness over 1 year after a minimum 3-month videoconference program for older nursing home residents. *Journal of Medical Internet Research*, 13(4), e93.
- Weinert, C., Cudney, S., & Hill, W. G. (2008). Rural women, technology, and self-management of chronic illness. *Canadian Journal of Nursing Research*, 40(3), 114–134.
- Weiss, J. A., Thomson, K., Burnham Riosa, P., Albaum, C., Chan, V., Maughan, A., ... Black, K. (2018). A randomized waitlist-controlled trial of cognitive behavior therapy to improve emotion regulation in children with autism. *Journal of Child Psychology and Psychiatry*, 59(11), 1180–1191.
- Willms, D. G., Best, J. A., Taylor, D. W., Gilbert, J. R., Wilson, D. M., Lindsay, E. A., & Singer, J. (1990). A systematic approach for using qualitative methods in primary prevention research. *Medical Anthropology Quarterly*, 4(4), 391–409.
- Wong, A., Chau, A. K. C., Fang, Y., & Woo, J. (2017). Illuminating the psychological experience of elderly loneliness from a societal perspective: A qualitative study of alienation between older people and society. *International Journal of Environmental Research and Public Health*, 14(7), 824. doi:10.3390/ijerph14070824

Appendix: Coding schema for assessment of loneliness among older adults

A. Risk and protective factors for loneliness

1. Age-associated losses
 - i. Loss of partners, family, friends (deaths, moving)
 1. Loss of social supports and network
 - ii Loss of physical health and functioning
 1. Pain, mobility
 2. Hampering ability to engage in social activities
2. Lack of social skills
 - i. Interpersonal skills to connect with others
3. Protective personality traits
 - i. Oneliness
 1. Enjoyment of solitude and solitary activities
 2. Not feeling a need for other people
 - ii. Spirituality
 1. Self-transcendence
 2. Organized religious practices

B. Experience of loneliness

1. Personal experience
 - i. Sadness
 1. Emptiness
 2. Depression
 - ii. Lack of Meaning
 1. Helplessness
 2. Hopeless

3. Unattached
 4. Feeling insignificant
 5. Feeling like an outsider
 6. Lack of control
2. Perception of others' experience
 - i. Lack of motivation or desire to seek relationships
 1. Lack of self-efficacy to find new relationships

C. Coping strategies

1. Acceptance of aging
 - i. Modifying expectations of one's own physical abilities
 - ii. Improvements with aging
 1. Less preoccupied with pleasing others
 2. Learning from experiences on engaging with others
 3. Learning how to manage one's own grief and loneliness
2. Compassion
 - i. Helping others with specific tasks
 - ii. Reaching out to others for social connection
 - iii. Get involved in causes larger than themselves
3. Seeking companionship
 - i. For organized activities
 - ii. For meals
 - iii. For conversations
4. Environment enables socialization
 - i. Communal dining area
 - ii. Communal gaming areas
 - iii. Communal library
 - iv. Organized activities—posted in a central location